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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,024	01/18/2002	Christopher J. Tatar	7589.0006	.1432

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EXAMINER
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DUDA, RINA I

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 04/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/054,024

Applicant(s)

TATAR ET AL.

Examiner

Rina I Duda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13 and 14 is/are rejected.
- 7) ☒ Claim(s) 11, 12, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of group I in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Drawings***

2. The drawings are objected to because all the boxes should be textually labeled, see 37 CFR 1.83(a). Correction is required. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 1, 3, 4, 6-8, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Maruo et al (US Patent 6091219).

Claim 1, Maruo et al teach a motion control system for a robot comprising a plurality of servomotors 28-31; a driver 22 for inserting and removing one or more control devices from the motion control system; and a communication path 45 for stacking the motion control devices.

Claims 3 and 10, Maruo et al describe in column 6 lines 43-50 that driver 22 can select a plurality of control devices.

Claim 4, figure 3 of Maruo et al describe motion units including motors 28-31 connected to encoders 41-44 and drivers 33-39; and a controller 22 for receiving the output signals from the encoders and outputting control signals to the drivers 33-39.

Claim 6, Maruo et al describes in column 6 lines 38-50 that driver 22 will insert/remove one or more control devices from the motion controller.

Claims 7 and 8, Maruo et al describe communication path 45 including a plurality of male connectors 53 and a plurality of female connectors 54 for connecting the motion devices.

5. Claims 13 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Brekosky et al (US patent 6431879).

The preamble of claim 13 has not been given any patentable weight because the recitation of the controller for a plurality of servomotors has been positively recited in the body of the claim.

Brekosky et al describe a printed board connector including a plurality of dip sockets 30 for inserting/removing different types of controllers; and a connector

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interface comprising a plurality of male and female connectors 44 and 46 for stacking a plurality of controllers.

Claim 14, Brekosky et al describe in column 3 lines 34-43 that their device is PC/104 compliant.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 5, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruo et al (US Patent 6091219) and Brekosky et al (US patent 6431879).

The difference between the teachings of Maruo et al and the limitation of claims 2 and 9 is that claims 2 and 9 recite that the controller is PC/104 compliant.

However, Brekosky et al describe a printed board contact portion 36 including a compliant portion 36a.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the digital circuit of Maruo et al to include the PC/104 compliant portion of Brekosky et al, since said portion will eliminate the need for a user/assembler to connect connectors and spacers in separate steps.

Claim 5, Brekosky et al describe a plurality of dip sockets 30 for inserting/removing one or more control processors.

***Claim Objections***

8. Claims 11, 12, 15, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: The prior art made of record does not teach a motion controller comprising a plurality of programmable logic devices providing chip select signal to a chip select input of a motion control processor; a storing device for storing the chip select signals for each plurality of programmable devices; and a motion device for causing the storage device to output the chip select signals to the plurality of programmable devices at substantially the same time based on a coordinated motion address.


10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The documents cited teach similar motion control devices including a plurality of servomotors, encoders, and servo-amplifiers.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rina I Duda whose telephone number is 703-305-0722.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached on 703-308-3370. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
Rina I Duda  
Examiner  
Art Unit 2837

RD  
April 19, 2003